

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

MEMORANDUM

Date: 27-JUN-2017

SUBJECT: **Flumethrin.** Response to Comments Regarding HED's Human Health Assessment Scoping Document in Support of Registration Review for Flumethrin.

PC Code: 036007

Decision No.: 525708

Petition No.: NA

Risk Assessment Type: Single Chemical/Aggregate

TXR No.: NA

MRID No.: 50140802-50140804

DP Barcode: D437893

Registration No.: NA

Regulatory Action: Response to Comments

Case No.: None

CAS No.: 69770-45-2

40 CFR: NA

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Background

Flumethrin, cyano(4-fluoro-3-phenoxyphenyl)methyl 3-[2-chloro-2-(4-chlorophenyl)ethenyl]-2,2-dimethylcyclopropanecarboxylate, is a synthetic pyrethroid insecticide that is registered for use in cat and dog collars that also contain imidacloprid to control ticks, lice, and mites. This document addresses only the active ingredient flumethrin.

HED provided a Human Health Assessment Scoping Document in 2016 in support of Registration Review for flumethrin (Memo, J. Van Alstine, et al., 07-SEP-2016; D434133). In the scoping document, the Agency noted that the residential exposure database is not adequate to support the Registration Review for flumethrin. As part of Registration Review, the Agency will reassess the exposures from the use of pet collars. Previous assessments have considered exposures to flumethrin from the pet collars assuming flumethrin was available as a liquid. However, recently, the Agency has questioned whether exposure from pet collars is a liquid

form, solid form, or some combination of both, which dictates how exposures are calculated. As a result, the Agency indicated that it was seeking information from the registrant on the relative amounts of dust versus liquid available for exposure as a result of the use of flumethrin-impregnated pet collars. The Agency also requested additional information to inform the risk assessment for post-application residential exposure and plans to work with the registrant to determine the exact data that can answer this question. A traditional pet transferable residue study (*i.e.*, a petting study) or other study that would inform the Agency's risk assessment was requested.

Comments Received

During the comment period to the flumethrin initial docket opening, Bayer submitted several studies regarding exposure to flumethrin through its use in pet collars as a comment on the flumethrin scoping document including the following:

- Determination of Exposure to Imidacloprid and Flumethrin During Administration of a Dermal Application Form, dated 06 April, 2010.
- Imidacloprid/Flumethrin 10%/4.5% Collar (all sizes) – Investigation of Composition of Surface Abrasion after Mechanical Stress, dated 15, November 2011
- Seresto Flea and Tick Collar (PNR 1427; EPA Reg. No. 11556-155) Formulation and Release Information in Response to EPA's Request in its September 7, 2016 Human Health Scoping Document, dated 20 December, 2016;
- Flumethrin Release from Seresto Collars by Torsional Stressing, dated 20 December, 2016

HED Response to Comments

HED reviewed the submitted data to determine whether it is sufficient to remove the anticipated need for a pet transferrable residue study. HED has completed a screening review of the data submitted by Bayer. Based upon this screening review, HED notes that additional information is needed in order to determine whether the submitted data is sufficient to assess potential residential post-application exposures, and how these data would be used to quantify risks from pet collar products that contain flumethrin. Therefore, at this time the need for data to satisfy the requirement for a pet transferrable residue study is not satisfied.